DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000715 Address: 333 Burma Road **Date Inspected:** 29-Oct-2007

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island

CWI Name: CWI Present: Yes No Art Peterson **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Closed Ribs

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe the dimensional testing of Orthotropic Box Girder (OBG) 10 Meter closed rib weld trial, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector Viars performed dimensional measurements of closed rib weld bevel land of 10 meter mock-up closed ribs # U01, U02, U05, U73 and U75. Measurements were taken starting at the left end (hand hole) side with locations at 200, 2130, 5035, 7920 mm on the near and far side of each rib. The recorded measurements of each rib were as follows, Rib # U01 1.5 to 2.1 mm, Rib # U02 1.7 to 2.1 mm, Rib U05 1.5 to 2.0 mm, Rib # U73 1.5 to 1.9mm, and Rib # U75 1.6 to 2.0 mm. Measurements of the bevel land were taken with an optical comparator.

Caltrans QA Inspector Viars also performed bevel angle measurements of closed rib # U01 near and far side with the following range recorded 26 degrees and 48 minutes to 27 degrees and 30 minutes.

Caltrans QA Inspector Viars chose closed rib # U05 to verify straightness, profile, warpage, height and gap dimensions on. The following maximum measurements were recorded, longitudinal straightness 3 mm at 2060 mm from left end far side, warpage 4.1 mm at W1 near side, profile 4.5 mm at 4690 mm near side with a height of 346 mm. The total length of the rib was measured at 10.050 mm.

At conclusion of dimensional measurements the closed rib were moved to the deck plate at fit-up station. The following picture illustrates closed ribs being moved to welding station after dimensional verification.

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Caltrans QA Inspector observed that dimensional testing appeared to be in general conformance with AWS D1.5 2002 requirements.



Summary of Conversations:

As identified within the contents of this report,

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer